REPORT ON INSECT CONTROL

LASSEN NATIONAL FOREST

HALL'S FLAT PROJECT

MOON SPRING AND WILLOW SPRING UNITS

I

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II

SUMMARY

Forest:	Lassen National Forest.
Project:	Hall's Flat.
Duration:	November 5, 1953 to March 21, 1954.
Species:	Ponderosa, Jeffery and Sugar Pine.
Insects:	D. brevicomis, D. jeffreyi, D. monticolae, and Melanophila (species).
Total Acreage:	28,251
Method Followed:	Peeling and Burning.
Number Trees Spotted:	4,155
Number Trees Treated:	4,155
Expended from Project Funds:	13,076.09
Expended from Contributed Time:	890.61
Total Cost of Project:	13,966.70
Total Cost per Tree:	4.56
Number Man Days Used (treater)	1,748
Number Man Days Used (effective time):	1,671
Results:	Successful.
Percent of Reduction Obtained:	

III

INTRODUCTION

On the basis of Dr. K. A. Salman's preliminary report of September 8, 1933 on five definite areas selected as possible units to be controlled, three were definitely selected. Namely; Project #1, Little Valley; Project #2, Willow Spring; Project #3, Moon Spring. These were selected after due consideration had been given as to accessibility, utilization, entomological considerations, and funds allotted for control work.

Spotting began November 2, 1933 and treating on November 8, 1933. Due to a much heavier infestation than was anticipated it was possible to complete only the Moon and Willow Spring units. The heavy infestation which was far in excess of what could be reasonably expected after examining the summer survey data, was probably due to a late flight of the beetles.

Treatment, which consisted of felling, peeling and burning terminated on March 21 due primarily to hazardous burning conditions.

IV

LOCATION OF PROJECT AREA

The "Project Area" shall be construed as meaning only that part which was completed. Namely; the Moon Spring and Willow Spring units. It is located in Townships 34 & 35 North, Range 5 & 6 East of Mount Diablo Meridian. The area is bounded thus; north boundary, edge of timber; west boundary, series of J. flats and Hat Creek Rim; south boundary, series of flats and brush fields; east boundary, series of flats separating it from body of timber in Little Valley unit. The entire area drains north into Fall River Valley.

V

TIMBER TYPES

In general the largest part of the project area is primarily Ponderosa Pine with some Jeffrey Pine in mixture near the fringes and around the flats where the percentage of Jeffrey Pine increases. A small amount of Sugar Pine occurs along the Coble Divide. Also varying amounts of Incense Cedar, White Fir and Oak are found in mixture with the two primary species named above.

VI

INSECTS

Four primary kinds of insects were considered on the control operation. D. brevicomis, D. jefferyi, D. monticolae, and Melanophila (species). In the case of Ponderosa Pine at least 50%of the trees infested by D. brevicomis were also infested by D. monticolae. Ponderosa Pine infested only by D. monticolae was generally small or thin barked trees. D. Jefferyi is apparently neither very active nor very numerous on this area. Only a small percentage of the losses in Jeffery Pine can be attributed to D. Jefferyi. Melanophila (species) is responsible for the greatest loss of Jeffery Pine and especially so in the light and scattered stands on the fringes. Predatory species were quite numerous especially the green terogosted (Temnochila).

VII

INFESTATION ON A PER SECTION BASIS

The total number of sections treated were 36.5, and the average for the entire project area was 114.5 trees per section.

VIII

ORGANIZATION

Camp was established at Hall's Flat with the men being housed in R.C.W. barracks. Personnel consisted of a Camp Foreman, Woods Boss, four spotters, two cooks, two flunkies, one saw filer, one truck driver, and twelve treating crews. (two per crew)

Transportation consisted of one 1½ ton Chevrolet truck and three Chevrolet pickups.

IX

SPOTTING

Spotting infested trees was accomplished by a four man crew, one compassman and three spotters. Spotting terminated one week before the treating.

Total man days spotting	376
Number trees per man day	11
Volume trees " " "	10,502 bd. ft.
Acreage spotted " "	62

X

TREATING

The peeling and burning method of treating was used exclusively. The treating crew consisted of twelve two man crews.

Total number trees treated	4,155
" volume " "	3,948,990 bd. ft.
" acreage " "	23,251
" man days treating	1,748

X (cont.)

Number trees treated per man day	2.37
Volume " " " "	2259
Acreage " " " "	13.60
Average volume per tree	950 bd. ft.

The two man crew was found to be more effective than the three man except during times of extreme fire hazard as the three man crew had a tendency to spend a good deal of time in conversation. The total number of trees, volume, and acreage for spotting was the same as for treating.

XI

MOON SPRING UNIT

	PONDEROSA		JEFFERY		TOTAL	TOTAL	NUMBER
	No. Trees	Volume	No. Trees	Volume	TREES	VOLUME	ACRES
Sec. 1	115	110,510	4	6,500	119	117,010	790
" 2	70	45,600	1	2,240	71	45,840	790
" 3	104	56,050	31	18,870	135	76,920	700
" 4							
" 5	66	65,970	19	19,450	85	85,400	640
" 6	160	109,910	16	16,740	176	126,650	640
" 7	74	68,360	20	34,470	94	102,830	640
" 8	84	86,770	29	49,130	113	135,900	640
" 9	2	4,050	9	14,510	11	18,560	420
" 10	23	16,660	1	510	24	17,170	353
" 11	72	56,950			72	56,950	640
" 12	83	97,640	9	10,890	92	108,730	640
" 13	11	25,940	9	20,560	20	46,200	640
" 14	45	86,530	11	21,890	56	108,410	640
" 15	58	44,260	3	9,650	55	53,910	320

XI (cont.)

	PONDEROSA		JEFFERY		SUGARPINE		TOTAL	TOTAL	NUMBER
	No. Trees	Volume	No. Trees	Volume	No. Trees	Volume	TREES	VOLUME	ACRES
Sec. 17	6	9,570	7	9,520			13	19,090	240
" 18	15	20,110	13	26,440			28	46,550	640
" 19	2	3,530	1	1,210			3	4,730	135
" 22	5	6,840	1	2,240			6	9,080	90
" 23	21	44,080	15	21,020			36	65,100	368
" 24									250
" 25	1	1,050	1	440	1	1,350	3	2,820	130
" 30	23	13,470	8	8,770			32	23,590	312
31	90	59,700	18	18,040			108	77,740	480
32	45	32,600	10	10,430	2	1,450	53	51,480	350
" 34	12	10,860	2	700			14	11,560	167
" 35	28	22,190	8	7,970			36	30,160	495
" 36	45	41,010	6	12,210			51	53,220	640
TOTALS	1250	1,145,470	254	343,760	3	2,800	1507	1,492,050	12,790

XI (cont.)

WILLOW SPRINGS UNIT

	PONDEROSA		JEFFERY		SUGARPINE		TOTAL	TOTAL	NUMBER
	No. Trees	Volume	No. Trees	Volume	No. Trees	Volume	TREES	VOLUME	ACRES
Sec. 3	74	67,930	23	37,590	20	25,950	117	131,520	640
" 4	154	130,000	5	9,310	22	40,910	181	180,220	640
" 14	20	29,830	4	6,100			24	35,930	200
" 15	165	145,140	3	6,520			166	151,660	640
" 16	154	120,640	21	21,670			175	142,310	640
" 17	199	126,470	22	15,090			221	141,560	640
" 18	70	43,950	11	6,820			81	55,770	300
" 19	82	69,500	19	21,170			101	89,670	360
" 20	106	79,870	7	11,270			113	91,140	640
" 21	193	151,980	10	7,910			203	159,890	640
" 22	218	204,920					218	204,920	640
" 25	62	90,550	4	12,350			66	102,900	540
" 26	62	85,920	2	4,770			64	90,690	335
" 27	221	250,870	4	9,190			225	260,060	640
" 28	228	201,990	5	6,940	7	7,270	240	215,470	640
" 29	59	72,310	14	15,690			73	87,900	640
" 35	148	95,240	1	440	27	52,330	176	146,010	640
" 34	77	70,070	19	20,960	3	1,730	99	92,760	640
" 35	40	79,500	11	10,980			51	98,480	356
TOTALS	2,384	2,095,860	185	232,760	79	129,190	2,648	2,456,830	10,461

XII

PERSONNEL

Donald E. Lewis:

A good man with initiative and a good, level head. Seems to have the making of a good project foreman.

Clyde Gilbert:

A summer employee of the Lassen Volcanic National Park. Has a nice personality and is a capable spotter. He is an excellent compass man and is a very thorough mapper.

Leo Whitney:

A very steady exacting spotter. Probably the most painstaking man in the spotting crew. Not a rapid worker but very thorough.

Irving Pearce:

A fair man but the weakest of the spotting crew. Is of a moody nature and does not mix very well with the other men. Does not take kindly to correction of his mistakes.

Henry Rush: (Straw Boss)

A very willing and capable man. Has a knack of getting along with the men under him and is well liked. However, if in a very tight place he is apt to get flighty. For this reason we do not feel that he would be an efficient project foreman, although he makes an excellent straw boss over the treaters.

Asa Lewis: (Saw Filer)

Lewis is a good filer but for some reason failed to pass the Saw Filer's Examination.

Ernest Martin: (Cook)

A poor cook, but very clean in the kitchen. Is a good fry cook but cannot bake or cook for a large crew. A very expensive cook as far as cost per meal goes and unwilling to try to please the men. Has a constant grumble about something and is never satisfied. I would not give him re-employment under any conditions as he would antagonize his kitchen and mess hall workers and it would be impossible to get anyone to work with him.

Andy Nicklonovich: (Cook)

A good fry cook and an excellent baker. He has a nice personality and was well liked by the kitchen workers as well as the men. Tries hard to please and would be a fairly economical cook if he ran a kitchen. His is not a finished cook now but he would learn.

Jack Cook: (Flunky)

An excellent all around man. A good hand either as a laborer or in the kitchen. A willing worker and well liked by everyone.

Elmo Lonquist: (Flunky)

A very willing boy. He is a good outside worker as well as a kitchen hand.

Ed Spaulding: (Flunky)

Practically worthless, being without any interest in the work as well as being lazy. Would not reemploy under any circumstances.

Ray Bowling: (Truck Driver)

A steady worker but he has no initiative. Will drive a truck but shows no interest in keeping it up. Very set in his ways and will not listen to suggestions. Would not reemploy him as a truck driver.

TREATERS LISTED BY SETS

I

V. Kelley - W. Kelley:

Both are good men and work well together. Very thorough in their work and try to get their trees well treated rather than try to make a big scale.

II

E. Richardson - Harry Richardson:

A hard working set with E. Richardson the better man of the two. Slovenly about limbing and where their trees fall but do a good treating job. Probably the third most productive set on the job.

III

L. Conger - D. Rankin:

A hard working set although neither man is a finished faller. Did thorough work. Rankin is a good steady man while Conger is a heavy drinker and made a nuisance of himself around camp when drunk, causing his discharge. Do not recommend Conger's reemployment.

IV

C. Scharch - F. Johnson:

An excellent set and stand second as far as production goes. Also thorough in their work. Both took an interest in the job and Scharch became very capable at spotting the infested trees.

V

E. Powell - H. Horn:

A slow but very thorough set. The most exacting set on the job and sacrificed scale to have the work done right.

XII (cont.)

VI

L. Askins - O. Breeden:

A very poor set. Askins was a hard man to get along with and would not put out work. Breeden did not like to work except under the best weather conditions. He was not satisfied with the job and this condition seemed chronic with him. However, he is a very capable man. Do not recommend reemployment of either man.

VII

A. Miller - O. Anderson:

The poorest set on the job. Miller was very slow but a good, steady hand and I recommend his reemployment. Anderson was not a good faller, he was lazy and would not put out work. In addition he was a hard drinking man and made a nuisance around camp when intoxicated, causing his discharge. Would not reemploy him under any circumstances.

VIII

F. Drew - J. Moore:

The best set on the job. Drew was the best individual man in camp and Moore, although an older man, was an excellent worker.

IX

T. Anderson - J. Clarke Jr:

A good set. Both men put out good work and, although not the fastest set, were thorough in their work.

X

W. Goodfellow - Geo. Johnson:

A young hard working set. Turned out lots of work and were very thorough.

XI

R. Haase - L.S. Anderson:

This set showed up poorly. Haase is a good man and turned out some fine work. Anderson is a good man but did not care for the job so quit.

XII

E. Lewis - M. Crissom:

A good set. Both are finished fallers and were very thorough in their work.

XIII

S. Covertson - H. Cook:

An excellent set of experienced fallers. Reemployment recommended.

XII (Cont.)

Earl Breedem: A poor man. Lazy and likely to quit job at any time. Would not reemploy under any circumstances.

Earl Rucker: Just a young man who was a good hard worker, but not an experienced fuller. However he will make a good man with a little more experience.

Charles Beckett: A very hard worker and a dependable man.

J. L. Moss: A capable man but too old to handle the job.

XIII

COSTS

Transportation		87.46
Groceries & Meat		2,043.09
Salaries:		15,520.06
Labor	7,753.45	
Spotting	2,030.72	
Cooks & Flunkies	2,109.05	
Overhead	1,646.86	
Gas, Oil & Grease		276.19
Motor Repairs		201.19
Equipment & Supplies		1,948.08
Total Cost		19,076.09
Subsistence Costs:		
Salaries (Cooks & Flunkies)		2,109.05
Groceries & Meat		2,043.09
		4,152.14
Total Meals served		11,267
Cost per meal exclusive of Salaries		.181
Cost per meal including Salaries of Cooks & Flunkies		.367
Spotting Costs:		
Spotter's Salaries		2,030.72
Trees Spotted		4,155
Volume Spotted		3,948,880
Acreage Spotted		23,251
Cost per Tree		1.06
Cost per M board feet		1.94
Cost per Acre		.087
Treating Costs:		
Treater's Salaries		8,847.31
Overhead "		533.00
		9,380.31
Total Treater Man Days		1,748
Effective Treater Man Days		1,671
" " Cost		7,352.40
Trees Treated		4,155

XIII (cont.)

Treating Costs: (cont.)	
Acres Treated	25,251
Volume Treated	5,962,880
	735240
Actual Treating Cost based on effective time:	
Per Tree	1.76
Per Acre	.316
Per M board feet	.337
Total Treating Cost including Overhead & Non-effective Time:	
Cost:	9,980.31
Per Tree	2.01
Per Acre	.403
Per M board feet	2.12

XIV
GENERAL

12

Due to the extremely open and mild winter the roads were in very poor condition and there were several roads that could not be used on this account. This made it necessary for some of the treating crews to walk as much as two miles each way and slowed up production somewhat.

However, the fire condition was so acute during the greater portion of the treating period that it was not feasible to leave these distant areas until the roads dried out or the danger of fire would have been so great that it would have probably been necessary to leave these areas untreated.

Because fire conditions were so very acute during the greater part of the period all work had to be trailed and patrolled until December 12, except for a few days. The situation was again quite serious the last week in January. From March 1 to the end of the job all work had to be trailed and rigidly patrolled.

For a week after the spotting was cleaned up the spotters were made part of the treating crews in order that they could see how the trees were peeling out and could get some experience in the treating phase of the work.

The cost items ran up pretty high. We figured the entire cost of all equipment that was sent here for the project although the tentage and cooking range was not used at all.

* FOOTNOTE:

Volumes computed from Standard Volume Tables for Region 5. Site IV used throughout. Volumes stated above are conservatively estimated 5% low due to discrepancy in volume tables, combined with the tendency of spotters to estimate too conservatively.

Respectfully submitted,
A. G. Brennais
A. G. Brennais
Senior Forest Ranger
In charge of Project
May 6, 1934 Date.

Approved:

May 6 1934 Date
George M Cowen Forest Supervisor

Approved:

_____ Date

_____ Regional Forester